Please provide the following information, and submit to the NOAA DM Plan Repository.

#### Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

#### 1. General Description of Data to be Managed

### ${\bf 1.1.\ Name\ of\ the\ Data,\ data\ collection\ Project,\ or\ data-producing\ Program:}$

GARFOGIS\_DATA\_TRACKING.xlsm

#### 1.2. Summary description of the data:

This spreadsheet is the central tracking document and inventory of "official" GIS datasets in development, published, or archived at the Greater Atlantic Regional Fisheries Office (GARFO). All shapefiles, data templates and other documents are described here.

### 1.3. Is this a one-time data collection, or an ongoing series of measurements?

Ongoing series of measurements

#### 1.4. Actual or planned temporal coverage of the data:

2012-12-31 to Present

#### 1.5. Actual or planned geographic coverage of the data:

W: -83, E: -65, N: 46, S: 24

#### 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

#### 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Not Applicable Platform: Not Applicable

Physical Collection / Fishing Gear: Not Applicable

#### 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

#### 1.8.1. If data are from another observing system, please specify:

#### 2. Point of Contact for this Data Management Plan (author or maintainer)

#### 2.1. Name:

Dean M Szumylo

#### 2.2. Title:

Metadata Contact

#### 2.3. Affiliation or facility:

Greater Atlantic Regional Fisheries Office

#### 2.4. E-mail address:

dean.szumylo@noaa.gov

#### 2.5. Phone number:

978-282-8479

#### 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

#### 3.1. Name:

Dean M Szumylo

#### 3.2. Title:

Data Steward

#### 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

#### 4.1. Have resources for management of these data been identified?

Yes

# 4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

Unknown

#### 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

### 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

**Process Steps:** 

- [Processes Vary] Based on the unique geography included in a regulated area boundary, the following processing steps may vary. Additional steps may be included, as necessary, if the regulated area boundary includes any of the following features (not an exhaustive list): - Cape Cod Canal - Nantucket Sound Submerged Lands Act boundary - Bathymetric contours - Geodesic Circles

- [Template Generation] Many NMFS Regulated Areas in Northeast and Mid-Atlantic Waters (Regulated Areas) share boundaries that are partially coincident with any combination of the following: 1) the U.S. Atlantic coastline; 2) the Submerged Lands Act boundary; 3) the U.S.-Canada Maritime Boundary in the Gulf of Maine; 4) the outward extent of the U.S. Exclusive Economic Zone (a.k.a. the "200-nautical mile line"). To standardize Regulated Area features sharing these boundaries, published shapefiles of the shared administrative boundaries were obtained from the authoritative agencies. A shoreline was selected that was suitable for general mapping purposes, freely and publicly available, of medium-resolution, and covering the extent of the U.S.. When necessary, the boundaries were transformed to NAD83. A series of template polygon shapefiles were then generated, using these authoritative boundaries as the outward extents of the polygon. All templates were generated in NAD83 geographic coordinate system. The templates created are: 1) Coast-to-EEZ: bounded by the coastline, the U.S.-Canada Maritime Boundary, the U.S. EEZ, and 81°W longitude off the southern extent of Florida (an arbitrary cut-off for the Atlantic); 2) Coast-to-SLA: bounded by the coastline, the U.S.-Canada Maritime Boundary, the Submerged Lands Act boundary, and 81°W longitude off the southern extent of Florida; 3) SLA-to-EEZ: bounded by the Submerged Lands Act boundary, the U.S.-Canada Maritime Boundary, the U.S. EEZ, and 81°W longitude off the southern extent of Florida. These templates were subsequently copied and edited, as needed by the Regulated Area spatial definitions.
- [Get Definition Text] The current legal spatial definition for the Regulated Area was copied from the e-CFR website. (Citation: Electronic Code of Federal Regulations)
- [Features From Templates] The (Coast-to-EEZ, Coast-to-SLA, SLA-to-EEZ) template shapefile was copied and projected to NAD83 Mercator Projection. The coordinates of the Regulated Area definition were transferred to a spreadsheet, converted to Decimal Degrees, plotted as a point shapefile in NAD83, and then projected to NAD83 Mercator Projection. To generate the Regulated Area boundary in ArcGIS, the template polygon was split by connecting these points in the order specified in the spatial definition. When the spatial definition specified that points were connected by following the (Coastline, SLA, EEZ), the coinciding outward extent of the template polygon was used. When the spatial definition specified that points were connected by following a straight line, rhumb lines were constructed. As an exception, points intended to fall along the U.S.-Canada Maritime Boundary were connected by following the geodesic line that legally defines that international boundary. After all points were appropriately connected, any portions of the template outside the defined Regulated Area were discarded. When multiple Regulated Areas are a part of a larger grouping of related Regulated Areas, these steps were repeated to generate a unique feature for each Regulated Area and the features were then combined into a single shapefile. The boundaries were densified with consecutive vertices spaced no more than 10 nautical miles apart, to

preserve rhumb line paths in other coordinate systems. The file was projected back to the un-projected NAD83 coordinate system.

- [Add Attributes] The standardized attribute schema was applied to the shapefile, and the fields were defined.
- [Policy Review] The Regulated Area spatial definition text, shapefile geometry and attribute values were reviewed with policy staff to verify that the shapefile accurately depicted and described the intended boundaries.
- [Check Geometry] The ESRI ArcGIS Check Geometry tool was run on the shapefile to identify any geometry problems. If problems were encountered, they were reviewed and corrected.
- [Metadata] A GARFO Regulated Area shapefile metadata template was developed using the EPA Metadata Editor v3.2. This template was applied and customized to reflect the specific characteristics of the given shapefile. The metadata was validated for FGDC CSDGM compliance.
- [Final Review] The shapefile was reviewed by members of the GARFO GIS Committee, policy experts from the GARFO Division responsible for the Regulated Area, and General Counsel, according to the GARFO GIS Data Distribution Policy.
- [Publication] The shapefile, with accompanying metadata, was uploaded for public download on the NOAA NMFS GARFO GIS website.
- [Archival] When a regulated area is removed from the Code of Federal Regulations, the shapefile is removed from the list of published regulated areas and added to the data archive. Fields are added detailing when the data was archived and a short reason explaining why the archival was necessary. Archived data is still available, but may not be actively published on the GARFO GIS website, or may be stored in a "historic data" section of the GARFO GIS website.

# 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

#### 5.2. Quality control procedures employed (describe or provide URL of description):

Before being approved for publication, GIS data must comply with the "GARFO GIS Data Distribution Policy." The policy was approved and established by the Regional Administrator in March 2014. Contact the Point of Contact to review a copy of the data distribution policy.

#### 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

#### 6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

#### 6.1.1. If metadata are non-existent or non-compliant, please explain:

#### 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

#### 6.2.1. If service is needed for metadata hosting, please indicate:

#### 6.3. URL of metadata folder or data catalog, if known:

https://inport.nmfs.noaa.gov/inport/item/29707

#### 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf

#### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

#### 7.1. Do these data comply with the Data Access directive?

Yes

# 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

### 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

#### 7.2. Name of organization of facility providing data access:

Greater Atlantic Regional Fisheries Office

#### 7.2.1. If data hosting service is needed, please indicate:

Not applicable

#### 7.2.2. URL of data access service, if known:

http://www.greateratlantic.fisheries.noaa.gov/educational\_resources/gis/data/index.html

#### 7.3. Data access methods or services offered:

Contact the Point of Contact for the data set to request access. The spreadsheet describes GIS data that are in development, published, or archived. GIS data that is

published is freely available for download by the public at http://www.greateratlantic.fisheries.noaa.gov/educational\_resources/gis/data/index.html.

#### 7.4. Approximate delay between data collection and dissemination:

UInknown

# 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

Not applicable

#### 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

#### 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended) No Archiving Intended

8.1.1. If World Data Center or Other, specify:

#### 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

The GIS Tracking Spreadsheet is a living document. As envisioned, it will be continually updated to show the current state of GIS data that is in development, published, or archived. Individual GIS data will be "archived" when the regulated areas they define are removed from the Code of Federal Regulations. This " archived" data will still be accessible as a historic view of spatial regulations. The data "archived" historic data will be stored in the GIS Drive (G:\) by archive date. The data may also be available on the GARFO GIS website, under a to-be-created page storing historic data. Contact the Point of Contact for more information.

#### 8.2. Data storage facility prior to being sent to an archive facility (if any):

Greater Atlantic Regional Fisheries Office - Gloucester, MA

G:\GIS\_PROJECTS\GIS\\_\_REG\_AREAS\_Data\_Development\tables\
GARFOGIS\_DATA\_TRACKING.xlsm

### 8.3. Approximate delay between data collection and submission to an archive facility: Unknown

# 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

Original and complete shape files are write protected and easily recovered if needed.

### 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.